

REMARKS

Prior to entry of the present amendment, claims 1, 4, 42, 43, 45-49, and 57-60 are pending. Claims 1, 4, 42, 43, 45-49, and 57-60 are rejected under 35 U.S.C. § 102. Applicants address each basis for rejection as follows:

Claim Amendments

Claim 1 has been amended to recite a *purified* glycoprotein. Support for this amendment is found, for example, at pages 28 and 29 of the English language specification, in the section entitled “2.1 Purification of the SC-1-Receptor CD55.” In view the amendment to claim 1, claims 57 and 58 have been cancelled and claims 43, 45-49, and 59-60 have been amended.

In addition, new claims 61-67 have been added. These claims correspond to claims 50-56, which were cancelled in the last reply. New claims 61-67 find support, for example, at page 4, line 15, to page 5, line 18, of the English language specification.

No new matter has been added by the present amendment. Applicants reserve the right to pursue any cancelled subject matter in this or in a continuing application.

Rejection under 35 U.S.C. § 102

Claims 1, 4, 42, 43, 45-49, and 57-60 are rejected under 35 U.S.C. § 102(b) as anticipated by Vollmers et al. (Cancer 76:550-558, 1995; hereafter “Vollmers”). Applicants respectfully disagree.

The Office states (page 3):

Applicants are reminded that the cell extract of Vollmers from stomach carcinoma cell line 23132 inherently contains the isolated 82 kD glycoprotein ... The fact

remains, inherently the 82 kD glycoprotein has been isolated from the cell extract. The starting material from which the claimed product is derived is the same, hence the rejection is maintained.

Applicants note that the claims, as amended, recite a *purified* glycoprotein. Vollmers fails to describe a purified glycoprotein having the features required by the claims, namely a glycoprotein that has an apparent molecular weight of about 82 kD in sodium dodecyl sulfate polyacrylamide gel electrophoresis. Moreover, the cell extract described by Vollmers does not inherently contain the *purified* glycoprotein encompassed by the claims. While adenocarcinoma cell line 23132 expresses the glycoprotein encompassed by the claims and the cell extract described in the “Western Blots” section at page 552 of Vollmers may contain the glycoprotein, nowhere does Vollmers describe the *purified* glycoprotein. In fact, Vollmers does not perform steps that, according to Applicants’ specification, are required to purify the 82 kD glycoprotein from 23132 cells.

At pages 28 and 29 of the specification, in the section entitled “2.1 Purification of the SC-1-Receptor CD55,” Applicants describe *purification* of the 82 kD protein isolated from the membrane fraction *using sequential size-exclusion and anion-exchange chromatography*. On this point, Applicants direct the Office’s attention to the Declaration of inventor Dr. Frank Hensel submitted with Applicants’ October 30, 2007 reply. Dr. Hensel, in paragraph 3, states:

Vollmers et al. does not describe an isolated glycoprotein including the human amino acid primary structure of CD55 and a tumor-specific N-linked glycostructure, where the glycoprotein has an apparent molecular weight of about 82 kD in sodium dodecyl sulfate polyacrylamide gel electrophoresis. Hensel et al., at page 5301, cites Vollmers et al. as describing a 50 kD protein in whole cell lysates bound by the SC-1 antibody. In Hensel et al., to detect the 82 kD protein, the stringency had to be altered and membrane preparations, not whole cell lysates, had to be used. The 82 kD protein was isolated from membrane fractions and purified by sequential size-exclusion and anion-exchange chromatography. These additional steps **required to purify** the 82 kD protein are not described in

Vollmers et al. (Emphasis added.)

As stated in the Hensel Declaration, the 82 kD protein was isolated from membrane fractions and purified by sequential size-exclusion and anion-exchange chromatography to obtain the purified 82 kD protein. As noted above, these required purification steps taught in Applicants' specification are neither described nor performed by Vollmers. Applicants submit that Vollmers clearly does not purify a glycoprotein having the features required by the pending claims. Vollmers does not even suggest that the 82 kD glycoprotein exists in a cell extract of 23132 cells, much less how to purify the glycoprotein. Hence, Vollmers cannot describe, either expressly or inherently, the purified glycoproteins encompassed by the present claims. Applicants submit that the claims, as amended, are free of the anticipation rejection over Vollmers. This basis for rejection should be withdrawn.

CONCLUSION

Applicants submit that the application is now in condition for allowance, and such action is hereby respectfully requested.

Enclosed is a Petition to extend the period for replying to the final Office Action for three (3) months, to and including April 29, 2009, and a check in payment of the required extension fee.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

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